

Abstract of the Disclosure

A fatigue-level estimation apparatus is provided. The apparatus comprises a heart rate calculator and a fatigue level estimator. The heart rate calculator receives a signal indicative of a heartbeat of an object to be estimated to calculate a heart rate signal changing sequentially in time. The fatigue level estimator estimates a fatigue level of the object by detecting a sharp and transient rise in the heartbeat in the heart rate signal. The fatigue-level estimation has less influence resulting from individual differences, while still maintaining high reliability in the estimation.